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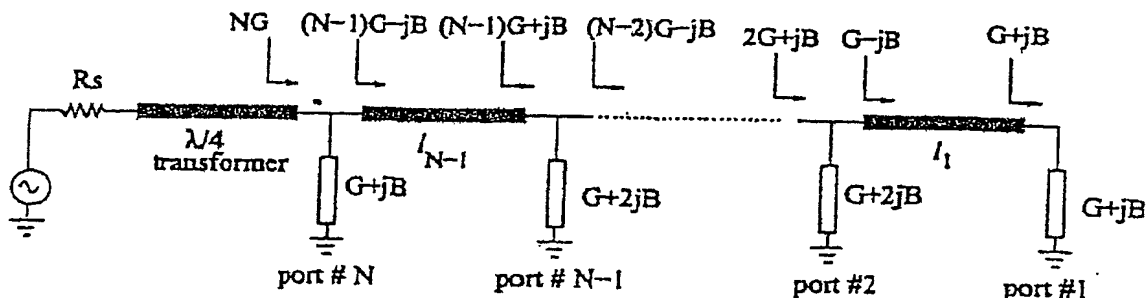
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(54) Title: A PHASED ARRAY ANTENNA WITH EXTENDED RESONANCE POWER DIVIDER/PHASE SHIFTER CIRCUIT



(57) Abstract: A phased array for generating a directed radiation pattern includes a plurality of power divider ports, a first tunable element connected in series between each pair of adjacent power divider ports, an antenna connected to each of the power divider ports, and a second tunable element connected in parallel with each antenna. The phased array can include equal phase differences between successive power divider ports, equal amplitude of the signal at each antenna, an equal amount of successive phase change in a signal at each antenna, a source connectible to at least one power divider port including an alternating power supply through a quarter-wave transformer, the first tunable element being either an inductor or a capacitor, the second tunable element being either an inductor or a capacitor, and/or each antenna separated by a successive antenna by a half wavelength.

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